



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,168

07/10/2008

Walter Kogel

11839/45

4068

26646 7590 02/19/2010

KENYON & KENYON LLP  
ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER

ARCE, MARLON ALEXANDER

ART UNIT

PAPER NUMBER

3611

MAIL DATE

DELIVERY MODE

02/19/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,168	<b>Applicant(s)</b> KOGEL ET AL.	
	<b>Examiner</b> MARLON A. ARCE	<b>Art Unit</b> 3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3611

### **DETAILED ACTION**

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is over 150 words.

#### ***Claim Objections***

2. Claim 11 is objected to because of the following informalities: the word "electrohydraulic" should be changed to electro-hydraulic". Appropriate correction is required.
3. Claim 17 is objected to because of the following informalities: the claim should read "the hydraulic power steering system according to claim 10, wherein the electric servo motor is adapted to act on one of (a) the drive output member by a superposition gearing or (b) the rack by a gearing. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3611

5. Claim 10 recites the limitation "control parts" in line 3. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 10-14 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Bohner (US 6612393). Bohner discloses a n electro-hydraulic steering system for motor vehicles comprising: a servo cylinder (4') with a piston rod (3'), a servo valve (7,7') with internal parts that actuates the piston rod to change the steering angle of a wheel (1); Bohner further has a rack connected to pinion (19), an electric motor (12,12') adapted to drive the rack and the piston rod {{the rack and piston rod are mechanically connected, see figure 1}} to adjust the angle of the wheel (1); a steering shaft (21) adapted to turn in order to allow a set of rotational sensors (25,26) to send a signal to a control part (29,29'), wherein the control part controls the servo valve; a drive output member (4) that drive the rack (3) from side to side due to the actuation generated by the servo valve; wherein, the rack and the piston rod are adapted to act in a parallel arrangement (fig. 1) with on another on an addition member (2) to jointly adjust the angle of the wheel (1). Regarding claim 13 and 14, the rack and the piston rod are pivotally or articulately

Art Unit: 3611

connected to the addition member. Regarding claim 4; a person of ordinary skill in the art would know that electric motors driving a pump or a hydraulic valve need to have a gear, worm gear or a geared shaft that makes the transfer of rotational force generated by the motor to the pump or internal parts of valve possible. in the instant case the electric motor (12) seems to have a geared shaft that drives a pump (10), the pump transmits fluid to the internal parts of the servo valve (7), and the internal parts of the valve are connected to the drive output member (4). Regarding claim 18, there is two electric motors (12,12') acting on the rack or control part due to the mechanical connections between the servo cylinder (4') and the rack.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohner (US 6612393). Bohner fails to show that the electric motors are able to transmit different rotational power. However; it would be obvious for someone skilled in the art to know that each the electric motor being controlled by two different control parts (29) would have a slight difference in rotational power in order to compensate one another, and in order to cooperate with each other.

10. Claims 10-12, 14,16 and 17are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto (US 5062494) in view of Bohner (US 6814177). Okamoto

Art Unit: 3611

discloses a hydraulic power steering for a vehicle comprising: a cylinder (4) with a piston rod (4a), a valve (2) with internal parts (fig 1A) that are adapted to actuate the piston rod in order to steer the wheel (5) in a direction; a rack (35), said valve (2) adapted to drive the rack in conjunction with the piston rod in order to steer the wheel in the same direction, a drive output member (36,34) that drives the rack with actuation from the internal parts of the valve (2), a steering shaft (24) adapted to act on the valve; wherein, the rack and the piston rod are adapted to act in parallel arrangement with one another on an addition member (11a) to jointly adjust the steering angle of the wheel. Okamoto fails to show an electric motor. However, Bohner discloses a steering system with a steering shaft (14) and a motor (12) driving the steering shaft and a drive output member (15) that is connected to a rack (16). It would have been obvious for someone skilled in the art to add an electric motor to the apparatus mentioned by Okamoto, the electric motor can drive the valve in order to provide fluid to the piston rod and to provide rotational power to the rack. Examiner likes to point out that the valve (2) has to be actuated by a driving means in order to operate (Okamoto fails to show a driving means)); it is obvious to have the electric motor with its output shaft {{such as the one mentioned by Bohner}} driving the valve (2) by actuating it in order to transfer fluid to the piston rod; wherein the electric motor would also drive the steering shaft and the drive output member. Regarding claim 11, the combination of the electric motor and the valve would result in an electro-hydraulic steering system. Regarding claim 12, the rack and piston rod are articulated by the addition member. Regarding claim 16 and 17, the drive output member is a pinion gear that contacts and actuates the rack.

***Allowable Subject Matter***

11. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARLON A. ARCE whose telephone number is (571)272-1341. The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (571) 272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marlon Arce/

2/11/10

MAA

/LESLEY D MORRIS/  
Supervisory Patent Examiner, Art Unit 3611